

WHAT IS CLAIMED IS:

1 1. In a casing for endoscopic manipulating head assembly, said
2 casing being formed of a synthetic resin material and largely
3 constituted by a main cover section and a grip cover section, said main
4 cover section being adapted to support thereon an operating member
5 of an angulation control mechanism, and said grip cover section being
6 projected forward from said main cover section to provide a grip portion
7 between said main cover section and an insertion tube of said
8 endoscope:

9 a rigid support plate provided mostly within said main section
10 and partly in said grip cover section to support said angulation control
11 mechanism;

12 a plural number of passage-forming tubular structural members
13 successively connected one after another within said grip cover section
14 for passing internal components to or from said insertion tube of said
15 endoscope, a tubular member at the proximal end of said grip cover
16 section being connected to said rigid support plate;

17 a first anti-twist lock portion for blocking rotational movements
18 of said grip cover section relative to said main cover section, formed by

19 said support plate between said main cover section and a proximal end
20 of said grip cover section connected to said main cover section; and
21 a second anti-twist lock portion formed between a joint portion of
22 said tubular members and said grip cover section of said casing.

1 2. A casing for endoscopic manipulating head assembly as
2 defined in claim 1, wherein a passage is formed in and through said
3 grip cover section by successively connecting three tubular structural
4 members, including a first tubular member being connected to said
5 support plate at a proximal end thereof and connected a second
6 tubular member at a fore end thereof through a reinforcing ring, and
7 said second tubular member having a fore end portion thereof inserted
8 in a proximal end portion of a third tubular member.

1 3. A casing for endoscopic manipulating head assembly as
2 defined in claim 2, wherein said first to third tubular members as well
3 as said support plate is formed of a light metal, and said reinforcing
4 ring between said first and second tubular members is of stainless
5 steel.

1 4. A casing for endoscopic manipulating head assembly as
2 defined in claim 3, wherein said first to third tubular members as well
3 as said support plate is formed of aluminum or an aluminum alloy.

1 5. A casing for endoscopic manipulating head assembly as
2 defined in claim 1, wherein said first anti-twist lock portion is formed
3 by placing opposite side edge portions of said support plate in a pair of
4 axial grooves provided on inner surfaces of said main and grip cover
5 sections of the casing.

1 6. A casing for endoscopic manipulating head assembly as
2 defined in claim 1, wherein said second anti-twist lock portion is
3 formed by an axial groove provided on a large diameter portion at a
4 fitting joint portion of said tubular structural member, and an axial
5 protuberance or rib provided on an inner surface of said grip cover
6 section for tight fitting engagement with said axial groove.